## **CLAIMS**

- [001] A dishwashing machine comprising a filter system for cleaning dishwashing liquid, characterised in that at least some of the dishwashing liquid is led out from the washing cycle of the dishwashing machine through a foam volume (11), wherein dishwashing residue contained in the dishwashing liquid is at least partially absorbed or retained by the foam volume (11).
- [002] The dishwashing machine according to claim 1, wherein the filter system comprises a foam developer (8) wherein liquid, preferably dishwashing liquid, is mixed with air to produce the foam volume (11).
- [003] The dishwashing machine according to any one of claims 1 or 2, wherein a filter container (1) is provided which receives the foam volume (11).
- [004] The dishwashing machine according to claim 3, wherein a wall, preferably the bottom (3) of the filter container (1) has openings (4), at least in part, through which air or a mixture of liquid and air can be introduced into the filter container (1).
- [005] The dishwashing machine according to any one of claims 3 or 4, wherein a wall, preferably the top of the filter container (1) has at least one opening (5) through which the dishwashing liquid can be introduced into the filter container (1).
- [006] The dishwashing machine according to claim 5, wherein at least one opening (5) for introducing dishwashing liquid into the filter container (1) is constructed as a distributor nozzle (5) so that the dishwashing liquid is introduced into the filter container (1) in fine jets.
- [007] The dishwashing machine according to any one of claims 3 to 6, wherein the filter container (1) has a first outlet through which the cleaned dishwashing liquid (12) is led from the filter container and a second outlet through which the foam volume (11) is led from the filter container (1).

- [008] The dishwashing machine according to any one of claims 3 to 6, wherein the filter container (1) has an outlet (14) through which both the cleaned dishwashing liquid (12) and also the foam volume (11) is fed from the filter container (1) to a three-way valve by which it is either fed back into the dishwashing cycle or passed into a waste water pipe of the dishwashing machine.
- [009] The dishwashing machine according to any one of claims 7 or 8, wherein the outlet (14) preferably has a variable-height overflow (10).
- [010] The dishwashing machine according to any one of claims 2 to 9, wherein dishwashing liquid is supplied to the foam developer (8) by a circulating pump from which dishwashing cycle of the dishwashing machine.
- [011] The dishwashing machine according to any one of claims 3 to 10, wherein the filter container (1) is disposed between a dishwashing container and an outer wall of the dishwashing machine.
- [012] A method for operating a dishwashing machine comprising a filter system for cleaning dishwashing liquid comprising the steps that a foam volume (11) is produced, at least some of the dishwashing liquid is led out from the washing cycle of the dishwashing machine through a foam volume (11), wherein dishwashing residue contained in the dishwashing liquid is at least partially absorbed or retained by the foam volume (11), the cleaned liquid (12) is at least partially fed back to the washing cycle of the dishwashing machine and the foam volume (11) containing the retained dishwashing residue is at least partly led out from the dishwashing machine.
- [013] The dishwashing machine according to claim 12, wherein the foam volume (11) is produced in a foam developer (8) in which liquid, preferably dishwashing liquid, is mixed with air.
- [014] The dishwashing machine according to any one of claims 12 or 13, wherein the foam

Attorney Docket No.: 2003P01405WOUS

- 11 -

volume (11) is produced in a filter container (1) or is introduced therein after production.

[015] The dishwashing machine according to any one of claims 12 to 14, wherein the passage of the dishwashing liquid to be cleaned through the foam volume (11) is effected in fine jets, e.g. by at least one distributor nozzle (5).